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Demographics and Socio-Economics



Who we are is an integral component of what makes us healthy. In terms of demographic make up, Massachusetts has several characteristics that support a healthy community. On the plus side, we are incredibly educated – we have the highest percentage of college graduates in the country. In sheer dollars and cents, we make more than most of our fellow Americans. We are rich in diversity with 25% of residents being immigrants or racial minorities or both.

Demographic information is also necessary to plan for the public health and medical systems of tomorrow. We must be cognizant of an aging population, the prevalence of disability, and the thousands of people who speak different languages.

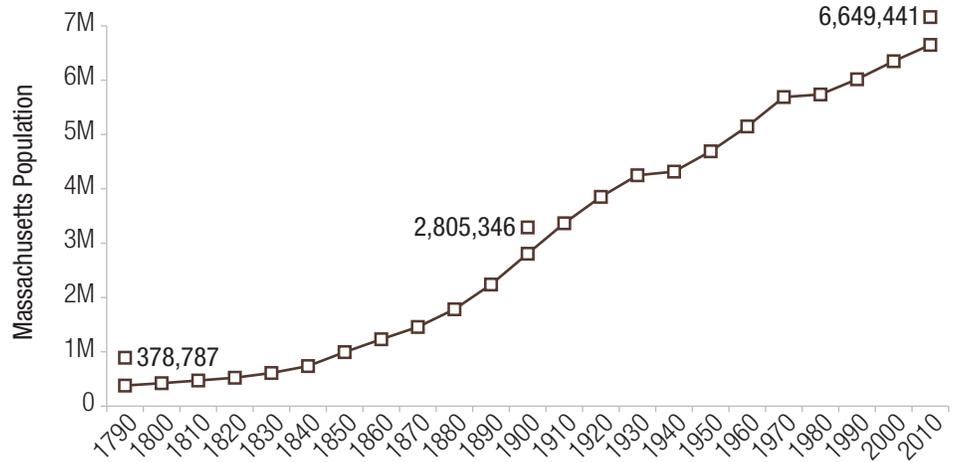
Who are the residents of Massachusetts? How many are they, and what are the social and economic conditions of their lives? This chapter attempts to provide some answers to these questions.

Population

Massachusetts is the third most densely populated state in the nation and it ranks 14th in population count.¹ Massachusetts has more than six

and one-half million people. Its population has risen with each Census since 1790. The fastest rate of growth was from 1830 to 1910 when the population grew from 600,000 to 3.4 million (Figure 1.1). Although the population continued to rise after 1910, the rate of growth slowed to less than one-half a percent per year after 1970. In recent years, international migration into the state and births to foreign-born mothers have nearly offset the migration out of the state.

Figure 1.1 Massachusetts Population from 1790 to 2010

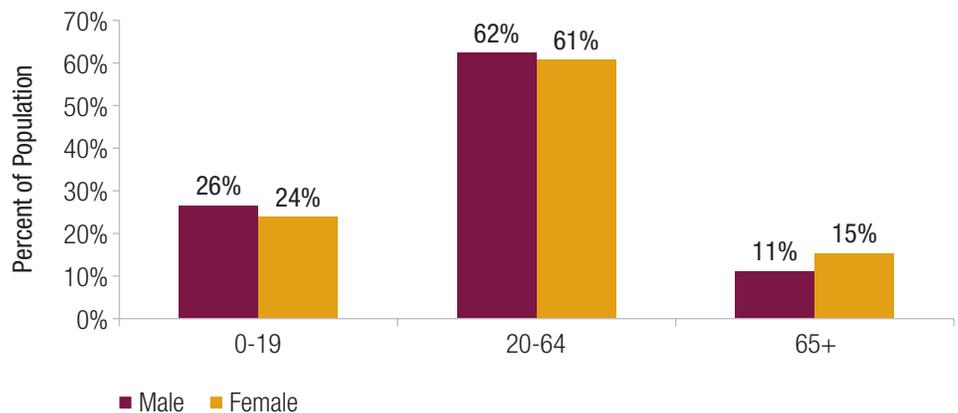


Source: US Census Bureau, Population Division.

Gender

Women are the majority of the Massachusetts population at 52%. Unlike the United States, in which there were more men than women until

Figure 1.2 Male and Female Population by Age



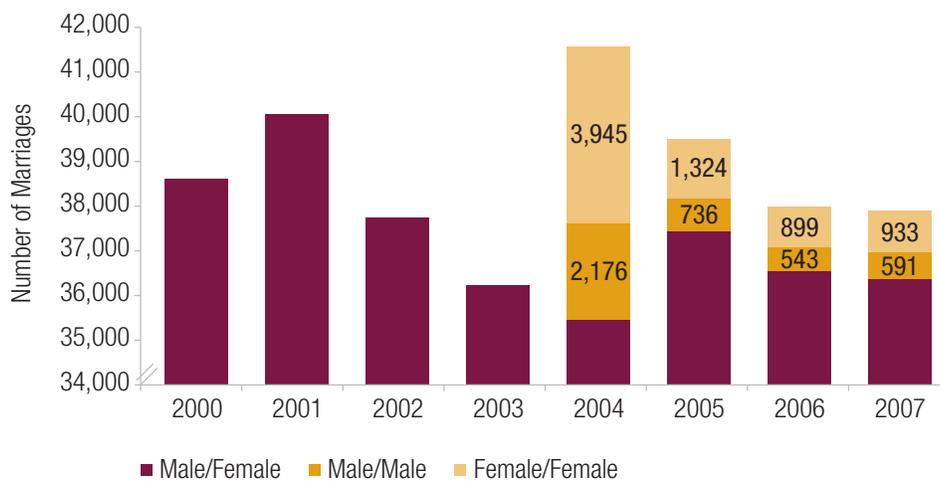
Source: CDC National Center for Health Statistics.

1950, there have always been more women than men in the state. There are more males than females from birth to age 19. For the middle age group of 20 to 64, and the oldest group, 65-plus there are more women than there are men. Women outnumber men 2.4 to 1 among those ages 85 plus.

Marital Status

Marriage rates have declined since the 1980s, and the percentage of residents who have never married is growing. In 2008, one in three women and two out of five men has never married. These rates are twice what they were in 2000. The marriage rate had a one-year increase to 6.5 per 1,000 population in 2004 when same-sex marriage was legalized, but before that and more recently, it has been around 5.5 per 1,000. In May 2004, Massachusetts became the first state in the United States to legalize same-sex marriage. From May 2004 through the end of 2007, there have been more than 11,000 same-sex marriages.

Figure 1.3 **Marriages Since 2000**

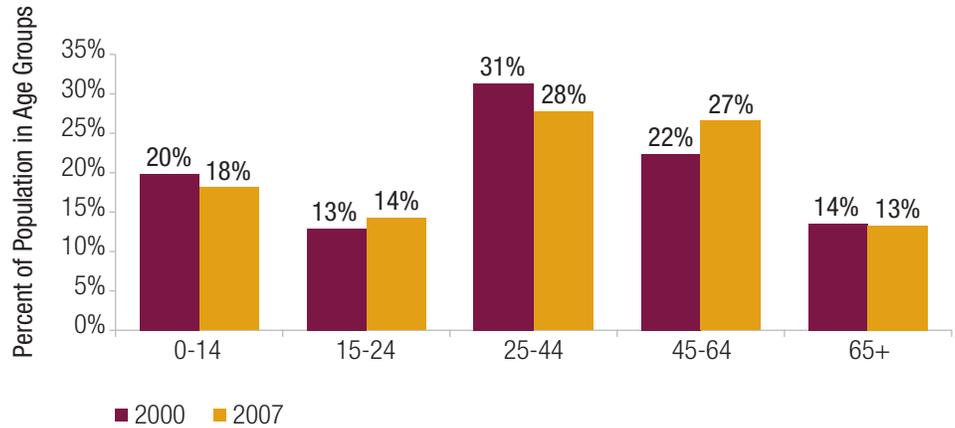


Source: MDPH Marriage File, 2000-2007.

Age

The state's population is aging with almost one-third of residents 50 or older. In 2000, the average age was 36.9 years, and in 2007, it has risen to 38 years. Since 2000, the numbers of children ages 0-14 and adults ages 25 to 44 have decreased. There have been increases in young adults ages 15 to 24 and adults ages 45 to 64, and an increase in the oldest old, adults 85 years or more. Massachusetts ranks 9th among states in percentage of the population over 85.

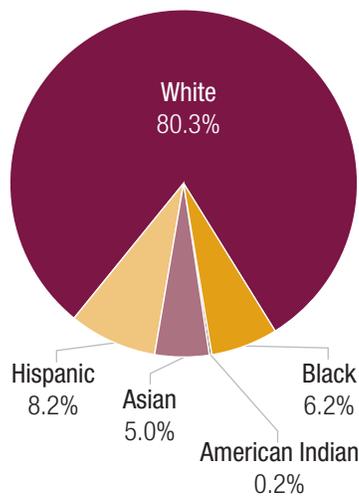
Figure 1.4 Population by Age Groups



Source: CDC National Center for Health Statistics.

*All 2007 age group percentages are statistically different from 2000 percentages ($p \leq 0.05$).

Figure 1.5 Race and Ethnicity



Source: CDC National Center for Health Statistics.

Race and Ethnicity

The race and ethnic make up of Massachusetts has changed dramatically since the mid-twentieth century. In 1950, one out of 50 people was non-White; today, one in five people is non-White. Even so, the state has a smaller proportion of minorities than the United States does (MA, 21% vs. US, 34%). Its White population ranks 22nd among states.² The Massachusetts population is 8% Hispanic, 6% Black, 5% Asian, 0.2% American Indian, and 80% White (Figure 1.5).

The non-White race and ethnic groups have significantly younger populations than Whites do. The average age of Whites is 40, while the average

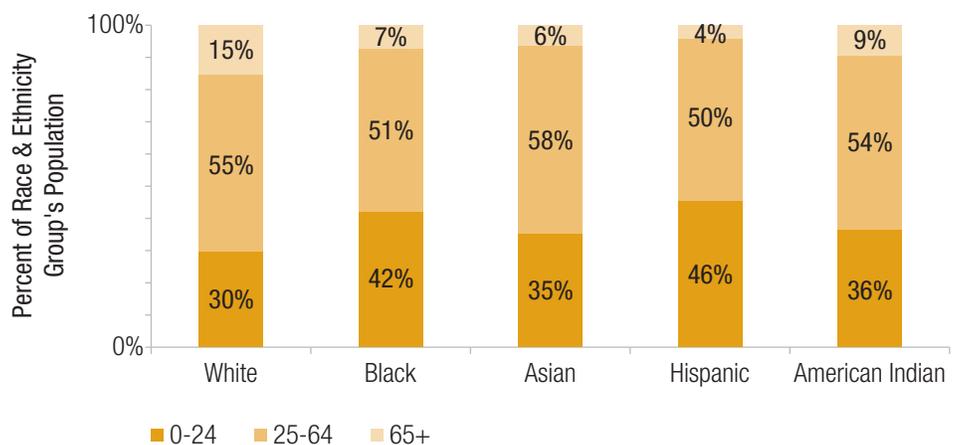
Figure 1.6 Mean Age by Race and Hispanic Ethnicity

Race/Hispanic Ethnicity Group	Mean Age
White	40
Black	32
Asian	33
Hispanic	29
American Indian	35

Source: CDC National Center for Health Statistics.

*Race and Ethnicity mean ages are statistically different from the White mean age ($p \leq 0.05$).

Figure 1.7 Race and Ethnicity by Age Groups



Source: CDC National Center for Health Statistics.

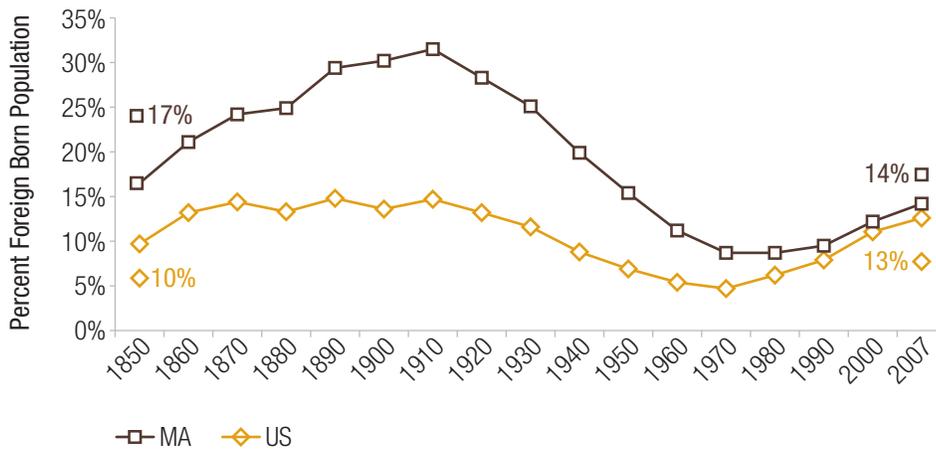
*All Race and Ethnicity age groups are statistically different from White age groups ($p \leq 0.05$).

age of Hispanics (the youngest age group) is 29 (Figure 1.6). All groups have more people younger than 25 than Whites do, while Whites have the largest percentage of persons ages 65 and older (Figure 1.7).

Foreign Born

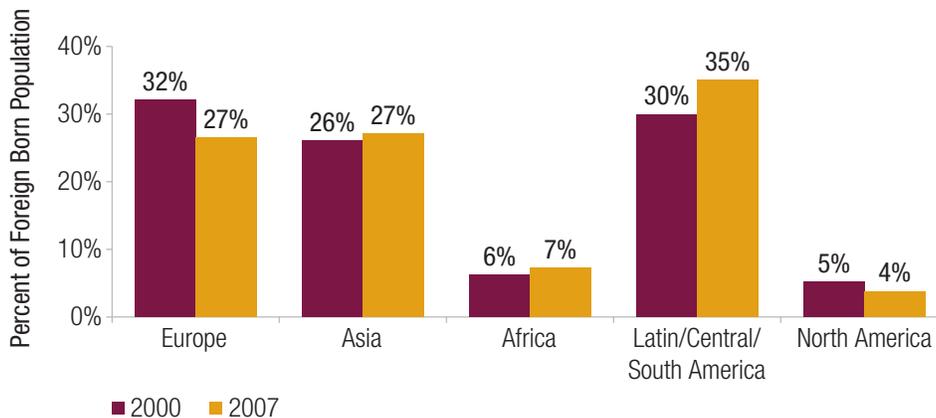
Massachusetts ranks 9th among the states in the percentage of its population that is foreign born at 14.2, while the United States percentage of foreign born is 12.6. There were large waves of immigrants from Europe in the late 1800s. Immigration declined until 1980 when it resurged (Figure 1.8). From 2000 to 2007, there were more immigrants from Africa and Latin America and fewer from North America and Europe (Figure 1.9).

Figure 1.8 Percent Foreign Born, Massachusetts and the United States, 1850-2007



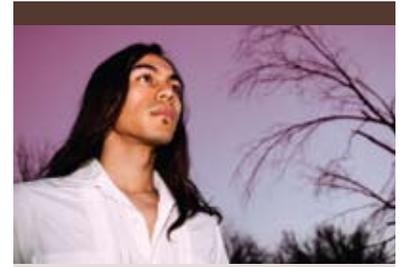
Source: US Census Bureau.

Figure 1.9 Place of Birth of the Foreign Born



Source: US Census Bureau.

*All percentages in 2007 are statistically different from the 2000 percentages ($p \leq 0.05$).



American Indian Tribes:

There are 11 recognized American Indian tribes in Massachusetts.³

Federally recognized tribes:

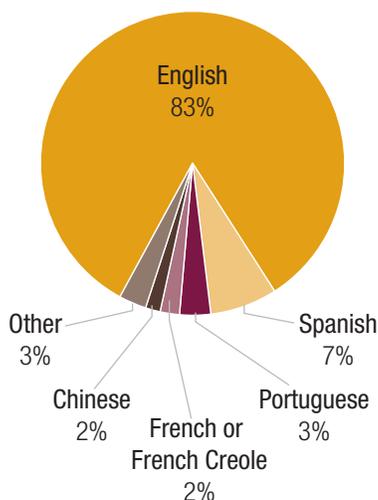
- » Wampanoag Tribe of Gay Head (Aquinnah)
- » Mashpee Wampanoag Tribe

State-recognized tribes:

- » Assonet Band of Wampanoags
- » Chappaquiddick Wampanoag
- » Chaubunagungamaug Nipmuck (Dudley)
- » Hassanamisco (thru Nipmuc Nation Tribal Council)
- » Herring Pond Wampanoag
- » Natick Nipmuc (thru Nipmuc Nation Tribal Council)
- » Pocasset Wampanoag (Fall River, Troy)
- » Ponkapoag
- » Seaconke Wampanoag (Rehoboth)

In 1950, one out of 50 people was non-White; today, one in five people is non-White.

Figure 1.10 Top Languages Spoken (Ages 5+)



Source: US Census Bureau, American Community Survey 3-Year Estimates, 2005-2007.

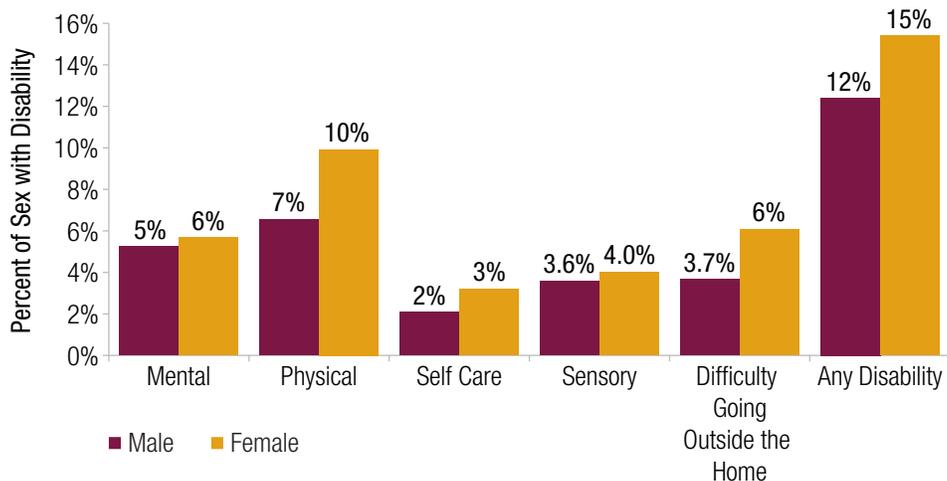
Language

More than 20% of the population speaks a language other than English at home. This ranks 12th highest among the United States. Spanish, Portuguese, and French or French Creole are the top languages spoken. These languages account for 75% of the top non-English languages. Seven percent of Massachusetts residents speak Spanish compared with 12.3% of persons nationally. Almost 6% of the state’s households are linguistically isolated, which means that no person age 14 years or over speaks English at least “very well.” This means that there are an estimated 350,000⁴ people who have difficulty communicating in their daily lives. Almost one-third of households that speak Asian languages are linguistically isolated as are 29% of Spanish-speaking households.

Disability

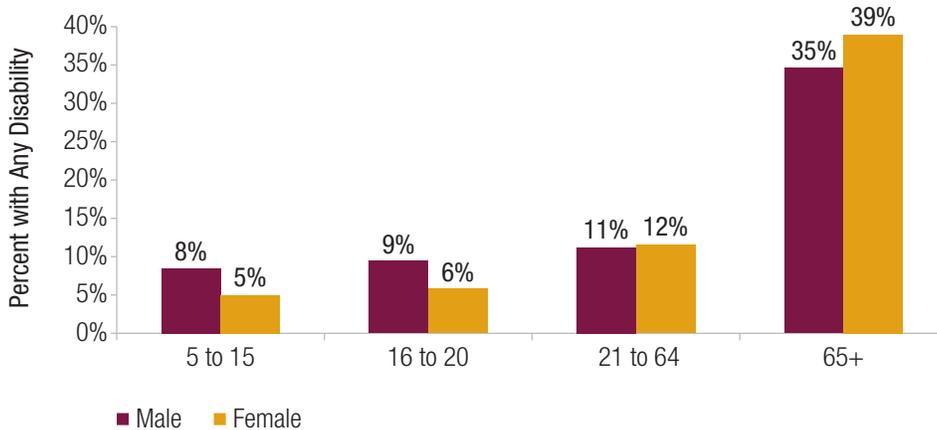
Fourteen percent of the population ages five and older has one or more types of disability, which are sensory, physical, mental, self-care, and go-outside-home. Females have a significantly higher percentage of all types of disabilities than males do, with the greatest disparity in physical disabilities (Figure 1.11). The percentage of persons with disabilities increases with age (Figure 1.12). Over 37% of people sixty-five and older have one of more disabilities. Massachusetts ranks 43rd among the states for percent with any disability among those over sixty-five (the US percent is 41%). The state ranks 16th for those ages 5 to 20 who have any disability (MA: 7.2%; US: 6.4%).

Figure 1.11 Disability by Type and Sex



Source: US Census Bureau, American Community Survey 3-Year Estimates, 2005-2007.
 *All female percentages are statistically different from male percentages ($p \leq 0.05$).

Figure 1.12 Disability Status by Age Group and Sex



Source: US Census Bureau, American Community Survey 3-Year Estimates, 2005-2007.

EOHHS Regions

The Executive Office of Health and Human Services (EOHHS) (of which MDPH is a part) divides Massachusetts into six regions for purposes of planning and resource delivery. The names of the regions are geographic: Western, Southeast, Northeast, Central, MetroWest, and Boston.

The regions are made up of cities and towns, and the health status of the regions varies. The number of people in each region varies from the largest, the MetroWest to the smallest, the Boston region (Figure 1.13).

Figure 1.13 Demographics of the EOHHS Regions

Region	Population	Number of Cities and Towns	Ages <20	Ages 65+	% Non-White	% Foreign Born (2000)	Largest City
Western Mass	833,216	102	25%	14%	19%	6%	Springfield
Central Mass	844,700	65	27%	12%	14%	7%	Worcester
Northeast	1,280,591	50	27%	13%	19%	12%	Lowell
Metro West	1,488,585	60	24%	9%	16%	12%	Cambridge
‡Southeast	1,278,245	69	27%	13%	11%	9%	Brockton
†Boston Region	711,603	5	23%	11%	46%	26%	Boston
State	6,436,940	351	26%	14%	19%	12%	Boston

Source: US Census Bureau and the MDPH Modified Age, Race/Ethnicity, & Sex Estimates, 2005.

†The Boston region includes Boston, Brookline, Chelsea, Revere and Winthrop.

‡The Cape & Islands part of the Southeast Region has 20% Ages <20 and 22% Ages 65+.

There are regional differences in race and ethnicity. Almost one-half of the Boston region's population is non-White, while only 11% of the Southeast region's population is non-White (Figure 1.13). The largest minority group

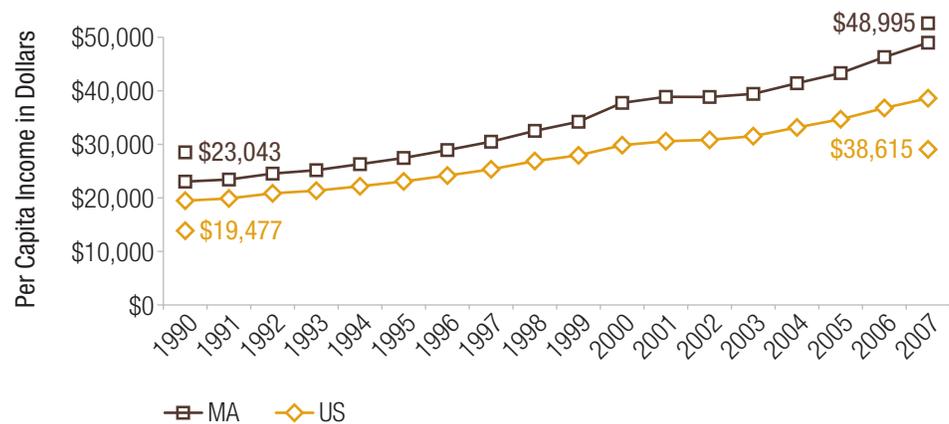
in the Western, Central, and Northeast regions is Hispanic. The largest minority group in the Southeast and Boston regions is Black, while the Asian population is the greatest in the Metrowest area.

Income

The median family income is \$77,000, and the mean family income is \$98,000. The high rankings for income, the state ranks 4th in median family income and 7th in household income nationally, are counterbalanced in part by the high cost of living in the state. Massachusetts ranked 43rd worst in CNBC's cost of living rankings⁵ and the cost of living index for Boston is 34% higher than the nationwide average.⁶

The state per capita income is \$49,000.⁷ This ranks 3rd among states with only New Jersey and Connecticut having higher incomes. Since 1990, [at least] the state has had a higher per capita income higher than that of the United States (Figure 1.14).

Figure 1.14 Per Capita Income 1990-2008, Massachusetts and the United States



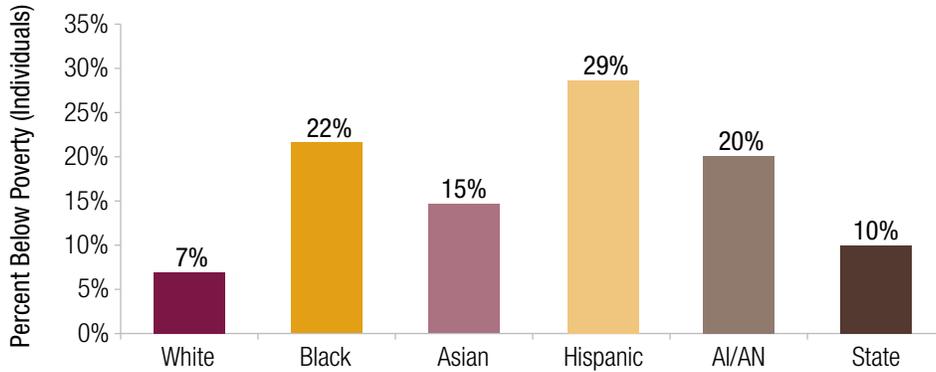
Source: US Department of Commerce Bureau of Economic Analysis, Regional Economic Information System, 1990-2008.

Almost 39% of children under 5 years of age who are living in a female-headed household with no husband live in poverty.

Poverty

Despite the relatively high-income figures for the state, there is considerable poverty.⁸ Ten percent of the state's population lives below poverty. Seven percent of the state's households (170,000) receive public assistance or food stamps. Certain groups are more likely to experience poverty. More than four times as many Hispanics live below the poverty level than White Non-Hispanics do (29% v. 7%). Almost 39% of children under 5 years of age who are living in a female-headed household with no husband live in poverty. One-fifth of people ages 16 to 64 with a disability live below poverty as compared with 7% of those without a disability.

Figure 1.15 Percent Below 100% Poverty



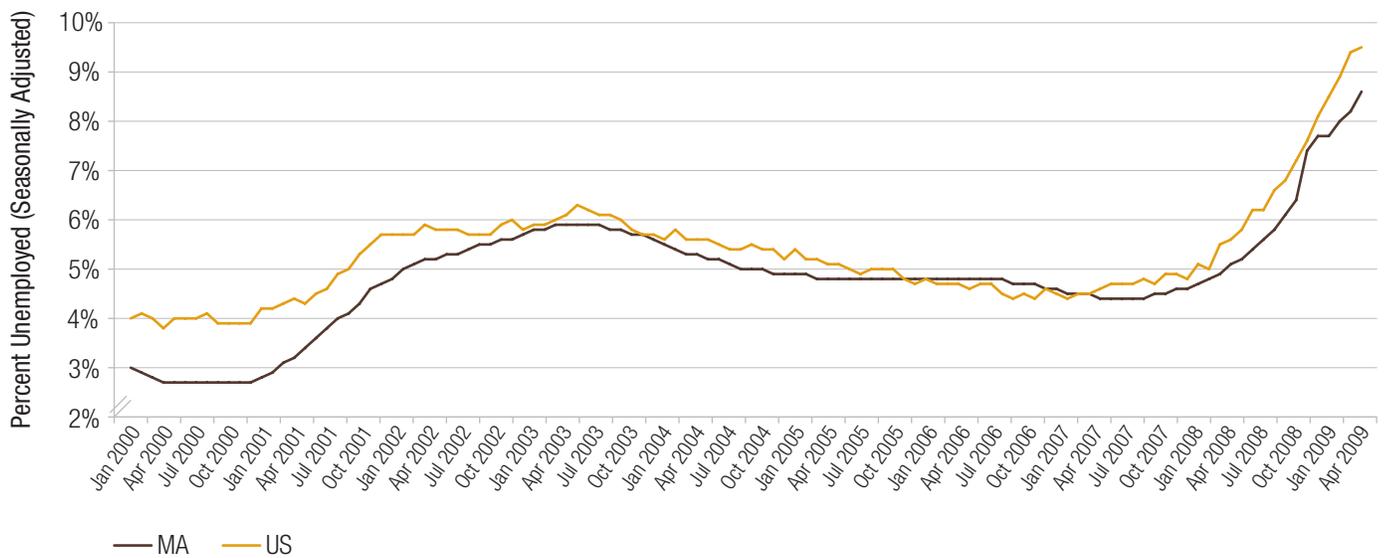
Source: US Census Bureau, American Community Survey 3-Year Estimates, 2005-2007.

Unemployment

Since June 2007, the Massachusetts monthly unemployment rates have been below the national unemployment rates. Before then, unemployment rates rose above the national rates during the recession in the early 1990s.

Even though the state rate is lower than the national rate, it has risen over 28% per year since January 2008 (4.9% to 8.8%, July 2009). Only one-fourth of persons ages 16 to 64 with a disability is employed.

Figure 1.16 Unemployment Rates, Massachusetts and the United States, 2000-2009



Source: Massachusetts Division of Unemployment Assistance.

Industry and Occupation

In 1990, the manufacturing and trade, transportation, and utilities sectors of industry employed about 45% of the state's workers. Since then, employment in those sectors has dropped, and that share of the workforce is now employed in professional and business, and health and social services.

Today, about 40% of the civilian workforce ages 16 and over are employed in the managerial and professional occupations. The median earnings range for this group ranges from a low of \$41,000 for community and social workers to a high of \$81,500 for lawyers (Figure 1.17).

Figure 1.17 **Occupations and Income**

Occupation Group	Median Income	Number of Employees	Percent of Employees
Management and professional	\$64,898	1,343,285	41%
Construction, extraction, maintenance, and repair	\$46,320	256,039	8%
Sales and office	\$41,397	803,847	25%
Production, transportation, and material moving	\$36,742	309,114	10%
Service	\$30,876	522,271	16%
Farming, fishing, and forestry	\$28,973	6,779	2%
State Median Income from Earnings	\$48,828	3,241,335	100%

Source: US Census Bureau, American Community Survey 3-Year Estimates, 2005-2007.

Education

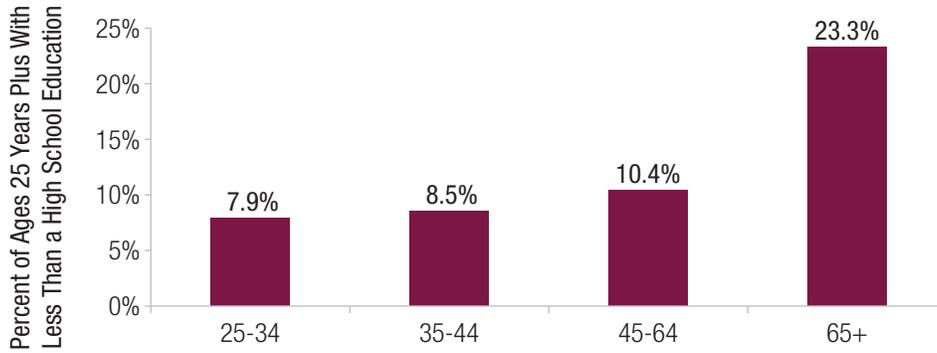
Massachusetts ranks first in the nation in the percent of persons over 25 who have a bachelor's degree or more (37%, including 16% with an advanced degree). Add to this the percentages with an associate's degree (8%) and those with some college but no degree (15%), and 60% of Massachusetts residents have been to college. Twenty-eight percent have graduated from high school.

These achievements are offset by the fact that 12% of the population has not graduated from high school. The percentage of Whites who do not have a high school diploma or equivalent is 10%, while the percentage of Hispanics is 35%. Among the foreign born, 25% do not have a high school diploma.

Educational attainment varies by age group. One fifth of those ages 65 and older has never been to high school (Figure 1.18).

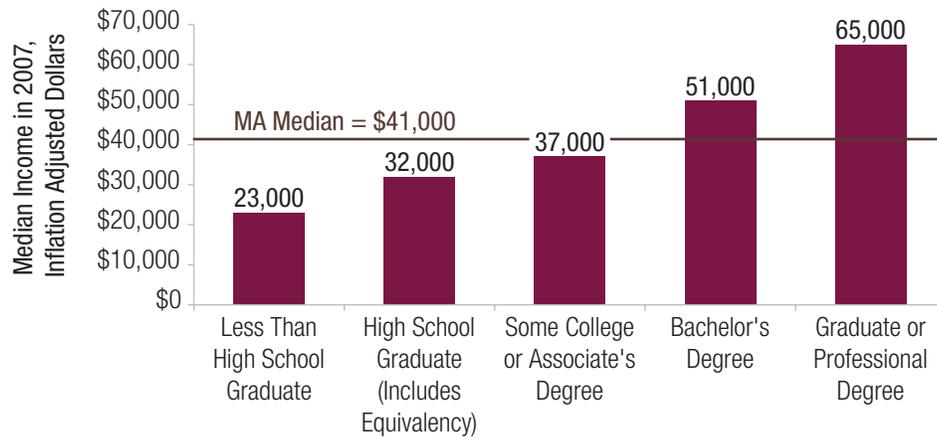
Education is closely related to income. Those with an advanced degree have a median income that is almost three times that of those with less than a high school education (Figure 1.19).

Figure 1.18 **Low Education by Age**



Source: US Census Bureau, American Community Survey 3-Year Estimates, 2005-2007.

Figure 1.19 **Median Income and Education**



Source: US Census Bureau, American Community Survey 3-Year Estimates, 2005-2007.

Conclusion

The social and economic status of Massachusetts contributes to the health of the state. Its high education and income support healthy habits and good health outcomes among its citizens. At the same time, not all residents experience the benefits of the state's relative prosperity. The factors that often separate the prosperous and the poor are race and ethnicity, disability, age, gender, and immigration status. Efforts to evaluate and improve the state of health in Massachusetts must proceed from knowledge of the people and the conditions of their lives.



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The Commonwealth's population is growing slowly and its composition is changing in two notable ways: Massachusetts is becoming more racially and ethnically diverse and its median age is rising. Each of these changes presents challenges for policy makers.

As cities across the Commonwealth become majority-minority, disparities in educational achievement and labor market outcomes, as well as health disparities need to be addressed. While there are important distinctions within each race-ethnic category (among Latinos, Cubans fare better than Dominicans; among Asians, Koreans fare better than Cambodians; among Blacks, West Indians fare better than native-born African Americans), poorer outcomes for minorities require a retooling of antidiscrimination policy to reduce disparities in labor and housing markets as well as education programs aimed at reducing dropout rates and improving education achievement.

The Commonwealth's changing age distribution is worrisome in two ways: Failure to attract or to retain younger workers, especially those with higher education, threatens the vibrancy of an economy heavily reliant on "knowledge workers." As the Baby Boomers begin to retire, it is crucial that a stream of educated workers be available to replace them. However, the high cost of housing has made Massachusetts, and especially the Boston metropolitan area, increasingly unaffordable, driving talent to other high-tech metropolitan areas where housing costs are lower. The creation of more affordable housing depends on reform of local zoning laws and the continued implementation of state housing programs.

If current Baby Boomers follow the path of previous generations of retirees, many will prefer to "age in place," in their current homes or elsewhere within their current communities. This will present challenges in many suburbs as local governments attempt to accommodate the

housing and transportation needs of a population that will, of necessity, rely on other means than private automobiles. This too implies a rethinking of current zoning restrictions and a focus on increasing density to increase choice and mobility for this population.

Policies created when Massachusetts was a faster-growing and less diverse place are obsolete. State and local governments will need to change their approach in a number of policy arenas, including education, antidiscrimination, housing, zoning, and transportation.



FIGURE NOTES

- Figure 1.1:** US Census Bureau. Population Division. Gibson C. and Jung, K. *Working Paper Series No. 56: Historical Census statistics on population totals by race, 1790 to 1990, and by Hispanic origin, 1970 to 1990, for the United States, regions, divisions, and states.* <http://www.census.gov/population/www/documentation/twps0056/twps0056.html>. Published September 2002. Accessed September 16, 2009. The population for 2010 was projected by the Population Division in the State Interim Population Projections by Age and Sex: 2004 - 2030. Published 2005. Accessed January 4, 2010. <http://www.census.gov/population/www/projections/projectionsagesex.html>.
- Figures 1.2, 1.4, 1.5, 1.6, 1.7:** CDC National Center for Health Statistics. Postcensal estimates of the resident population of the United States for July 1, 2000-July 1, 2007, by year, county, age, bridged race, Hispanic origin, and sex (Vintage 2007). Prepared under a collaborative arrangement with the US Census Bureau; released August 7, 2008. <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>. Accessed September 5, 2008.
- Figure 1.3:** The total for 2006 includes 1 marriage with missing gender information.
- Figure 1.8:** US Census Bureau. Population Division. Gibson, CJ and Lennon, E. *Population Division Working Paper No. 29, "Historical Census Statistics on the Foreign-born Population of the United States: 1850-1990"*, Table 8. Race and Hispanic Origin of the Population by Nativity: 1850 to 1990. February 1999. <http://www.census.gov/population/www/documentation/twps0029/twps0029.html>. Accessed September 16, 2009.
- Figure 1.9:** Data for 2000 are from US Census Bureau, Census 2000. Data for 2007 are from the American Community Survey, Data Set: 2005-2007. Those born at sea or born in Oceania = < 1%, and they were excluded from this figure.
- Figures 1.10, 1.11, 1.12, 1.15, 1.17, 1.18, 1.19:** US Census Bureau, American Community Survey, Data Set: 2005-2007 American Community Survey 3-Year Estimates. http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS&_submenuId=&_lang=en&_ts=. Accessed September 16, 2009.
- Figure 1.13:** The population for the EOHHHS Regions in 2000 was calculated by adding the Census 2000 counts of the constituent cities and towns. The 2007 data are estimates from the US Census Population Estimates program, which were also aggregated from cities to regions. Table, SUB-EST2007-05-25. Population Division, US Census Bureau. Release Date: July 10, 2008.

Figure 1.15: Income Guidelines as published in the Federal Register on January 24, 2007. In this figure, race and Hispanic ethnicity are not mutually exclusive, except for White Non-Hispanic. For example, the “Hispanic” bar includes Hispanics of any race.

ENDNOTES

- 1 US Census Bureau, American Community Survey Ranking Tables, 2007. Available at http://factfinder.census.gov/servlet/GRTSelectServlet?ds_name=ACS_2007_1YR_G00_&_lang=en&_ts=271167695392. Accessed August 13, 2009. Unless otherwise noted, the rankings in this chapter are from this source.
- 2 The ranking table (R0209) is for non-Hispanic white (alone) population, which we use as an estimate of the white population.
- 3 Massachusetts Commission on Indian Affairs (MCIA), Native American Tuition Waiver Program Guidelines, http://www.mass.gov/?pageID=ehedmodulechunk&L=4&LO=Home&L1=Economic+Analysis&L2=Executive+Office+of+Housing+and+Economic+Development&L3=Department+of+Housing+and+Community+Development&sid=Ehed&b=terminalcontent&f=dhcd_ia_ia&csid=Ehed, accessed October 2, 2009.
- 4 Calculated as 5.6% of 2,448,648 households with an average of 2.54 persons per household.
- 5 <http://www.cnbc.com/id/19558099>.
- 6 US Census Bureau, Statistical Abstract of the United States: 2009 (128th Edition), Washington, DC, 2008. Table 706. Cost of Living Index—Selected Urban Areas: Annual Average 2007.
- 7 The United States Department of Commerce, Bureau of Economic Analysis estimate of per capita income (\$48,995) is higher than that of the American Community Survey (\$32,000) because of differing methodologies.
- 8 The federal 100% poverty level for a family of 4 in 2007 was \$20,650. Income Guidelines as Published in the Federal Register on January 24, 2007. For years 2005 and 2006, the poverty level was \$20,000. Health and Human Services websites: <http://aspe.hhs.gov/poverty/05poverty.shtml> and <http://aspe.hhs.gov/POVERTY/06poverty.shtml>. Accessed 10/2/09.